

SWAGE COLLAR WITH INTERNAL SEALING INSERT

ABSTRACT OF THE DISCLOSURE

A swage collar and an internal sealing insert form a swage collar assembly used in combination with a structural fastener to prevent leakage through a connection of workpieces fastened together by the structural fastener. The swage collar has a hollow, generally cylindrical main body portion with a main central bore, and a base portion with an internal shoulder formed in the main central bore so as to form a seal receiving guide. The shaft of the fastener typically includes a threaded section and an unthreaded section, and the internal sealing insert interfaces with the threaded section and the unthreaded section of the shaft of the pin. In an alternate embodiment, the internal sealing insert interfaces with the unthreaded section of shaft of the pin. The swage collar assembly is fitted over the fastener, a swaging tool is fitted over the swage collar assembly, and the swaging tool is forced over the swage collar assembly with sufficient force to cause plastic deformation in the swaging collar to force the swaging collar and internal sealing insert into engagement with the shaft of the fastener.